

# Sadra Heydari

Ph.D. student in Economics @ Adam Smith Business School (University of Glasgow)

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## Education

### Ph.D. in Economics

⌚ Oct 2025 – Aug 2028 (expected)

🏛 University of Glasgow — Adam Smith Business School

**Research title:** *Strategic Interaction in Industry Dynamics*

### MRes in Economics (with Distinction)

⌚ Sep 2023 – Dec 2025

🏛 University of Glasgow — Adam Smith Business School

GPA: 19.9/22

**Dissertation Title:** *Endogenous R&D Network Formation with Heterogeneous Firms.*

### B.Sc. in Computer Engineering (Minor in Economics)

⌚ Sep 2018 – Jun 2023

🏛 Sharif University of Technology — Department of Computer Engineering

GPA: 17.02/20.0

## Additional Certificates:

(2024) Summer School on Social Choice & Fair Division, Tehran Economic Policy Think Tank [Certificate]

## Research Interests

- Industry Dynamics
- Innovation and R&D
- Endogenous Entry/Exit
- Endogenous Growth
- Industrial Organization
- Het. Firms models

## Publication(s)

### Absolute Intragenerational Income Mobility in Iran (2023)

🔗 [Link]

Amanzadeh, N. and Heydari, M.S., *The Quarterly Review of Economics and Finance*. 90: 38-50.

## Working Papers

### R&D Networks under Heterogeneous Firm Productivities

🔗 [Draft]

Heydari, M.S., Kaniz, Z., and Montoya-Blandón, S.

## Honors and Awards

2023	<b>Economics Scholarship (2+3)</b>	Adam Smith Business School; University of Glasgow	Glasgow, UK
2021	<b>Best Paper</b>	4th Iran Economic Forum; Tehran Institute for Advanced Studies (TeIAS)	Tehran, Iran
2018	<b>Silver Medal</b>	12th International Olympiad on Astronomy and Astrophysics (IOAA)	Beijing, China
2017	<b>Gold Medal</b>	13th National Astronomy and Astrophysics Olympiad	Tehran, Iran

## Selected Courses

### 🏛 Adam Smith Business School (University of Glasgow)\*

Macroeconomics	(20/22)	Macroeconomics of Inequality	(19/22)	Industrial Organization	(21/22)
Mathematical Methods	(20/22)	Bayesian Data Analysis	(22/22)	Computational Macro	(20/22)

### 🏛 Sharif University of Technology

*Economics Courses*                    *Mathematical Courses*                    *Data-oriented Courses*

Intro to Macroeconomics	(19.9/20)	Differential Equations	(17.8/20)	Advanced Programming	(19.3/20)
Game Theory*	(20.0/20)	Numerical Computation	(17.4/20)	Machine Learning*	(16.5/20)
Industrial Organization	(17.3/20)	Discrete Structures	(17.5/20)	Computer Simulation	(19.7/20)

### 🏛 Audited and Online Courses

Using Big Data to Solve Social and Economic Problems (*Harvard*), Natural Language Processing with Deep Learning (*Stanford*), Macroeconomics I\*, II\* (*Sharif*), Microeconomics I\* (*Sharif*)

\*: Graduate (Ph.D.) level Course

## Skills

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**Programming Language:** Python (*advanced*), Java (*advanced*), C / C++, SQL.

**Statistical Programming Languages:** R (*advanced*), Julia (*modest*), Stata, MatLab & Octave.

**Tools and Software:** MS Excel, L<sup>A</sup>T<sub>E</sub>X, Jupyter NB / G Colab, Git / GitHub, Dynare, ArcGIS, Gephi, Vensim.

**Language:** Farsi/Persian (*native*), English (*fluent* - IELTS: 8.0).

## Teaching Experience

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**Graduate Teaching Assistant**  Adam Smith Business School — University of Glasgow

- *Econometrics 1*: Fall 2025

**Teaching Assistant**  Sharif University of Technology

- *Probability & Statistics*: Fall 2020, Spring 2021
- *Data Structure & Algorithm*: Spring 2021
- *Introduction to Macroeconomics*: Spring 2021
- *Game Theory*: Fall 2021\*, Spring 2021

\*: Graduate-level Course

## Work Experience

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**Junior Data Scientist** | *Metodata*

Jan 2022 - Sep 2022

Collaborated under the supervision of Dr. *Meysam Alizadeh*.

- Household financial transaction analysis & anomaly detection ([Central Bank of Iran](#))
- Public opinion & brand analytics using social media
- Hotel demand prediction for private booking company

**Data Engineer Intern** | *Institute for Research in Fundamental Sciences (IPM)*

Jun 2020 - Sep 2020

Contributed to the R&D team of Iran's National Observatory (INO) project.

- Weather station data pipeline & analysis
- Night-sky cloud detection

## References

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**Dr. Richard Dennis**

 [webpage](#)

 [richard.dennis@glasgow.ac.uk](mailto:richard.dennis@glasgow.ac.uk)

Professor in Economics at Adam Smith Business School, University of Glasgow

**Dr. Naser Amanzadeh**

 [webpage](#)

 [amanzadeh@berkeley.edu](mailto:amanzadeh@berkeley.edu)  
Assistant Professor in Economics at Graduate School of Management and Economics, Sharif University of Technology

**Dr. Zafer Kanik**

 [webpage](#)

 [zafer.kanik@glasgow.ac.uk](mailto:zafer.kanik@glasgow.ac.uk)

Assistant Professor in Economics at Adam Smith Business School, University of Glasgow

**Dr. Santiago Montoya-Blandón**

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Assistant Professor in Econometrics at Adam Smith Business School, University of Glasgow